

19 Mar 1993

FL1DK-B

FILTER, BANDPASS

1. GENERAL. This procurement requires a set of tunable bandpass filters that operate in a frequency range of 2.5 to 18 GHz.

2. CLASSIFICATION. Type II, Class 6, Style EP and Color R in accordance with MIL-T-28800 for shipboard applications. Power source requirements are not invoked. EMI requirements are not invoked.

3. OPERATIONAL REQUIREMENTS. The filter kit shall meet the requirements specified below.

3.1 Frequency range. 2.5 to 18 GHz.

3.2 Insertion loss. 2.0 dB maximum.

3.3 Power rating. 50 watts continuous and 100 watts peak.

3.4 VSWR. 2.0:1 maximum.

3.5 Passband width. Passband width values of the filters shall be in accordance with table 1.

TABLE 1. Passband Width Values.

| <u>Attenuation</u> | <u>Bandwidth</u> |
|------------------------|--|
| 3 dB 35 dB 50 dB | 50 MHz \pm 10% 100 MHz Maximum 150 MHz Maximum |

3.6 Impedance. 50 ohms nominal.

3.7 Connectors. Type N female.

4. GENERAL REQUIREMENTS.

4.1 Weight. 9.1 kg (20 lbs)

4.2 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.3 Transit case. The style P transit case shall provide protection and have positions for each component of the filter kit. The case shall be in compliance with the requirements set forth in MIL-T-28800.